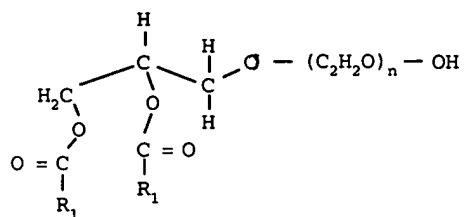


CLAIMS

What is claimed is:

- 1 1) A lipid compound represented by the formula

2



3

- 4 wherein R_1 is a long chain fatty acid, R_2 is a long chain fatty chain between 11 and
- 5 25 carbons in length, and wherein the variable “n” is an integer between 11 and 46, and
- 6 wherein said compound is characterized by the ability to inhibit biological activity
- 7 of phospholipase A_2 .

- 1 2) The compound of claim 1, wherein said compound is further characterized by the
- 2 ability to inhibit biological activity of phospholipase A_2 in vitro at concentrations less than
- 3 or equal to 1% by volume.

- 1 3) The compound of claim 1, wherein said compound is characterized by the ability
- 2 to inhibit biological activity of cyclooxygenase-2

- 1 4) The compound of claim 1, wherein said R_1 long chain fatty acid is between 11 and
- 2 25 carbons in length.

- 1 5) The compound of claim 1, wherein said R_2 long chain fatty acid is between 11 and
- 2 25 carbons in length.

- 1 6) The compound of claim 1, wherein the variable “n” is an integer between 11 and
- 2 46.

1 7) The compound of claim 1, wherein R1 represents a long chain fatty acid selected
2 from the group consisting of:

- 3 (a) $\text{CH}_3(\text{CH}_2)_{10}$,
- 4 (b) $\text{CH}_3(\text{CH}_2)_{10}(\text{CH})_2(\text{CH}_2)_7$, and
- 5 (c) $\text{CH}_3(\text{CH}_2)_{12}$.
- 6 (d) $\text{CH}_3(\text{CH}_2)_{14}$,
- 7 (e) $\text{CH}_3(\text{CH}_2)_{16}$,

1 8) The compound of claim 1, wherein R2 represents a long chain fatty acid selected
2 from the group consisting of:

- 3 (a) $\text{CH}_3(\text{CH}_2)_{10}$,
- 4 (b) $\text{CH}_3(\text{CH}_2)_{10}(\text{CH})_2(\text{CH}_2)_7$,
- 5 (c) $\text{CH}_3(\text{CH}_2)_{12}$,
- 6 (d) $\text{CH}_3(\text{CH}_2)_{14}$, and
- 7 (e) $\text{CH}_3(\text{CH}_2)_{16}$.

1 9) The compound of claim 1, wherein the variable “n” is an integer between 11 and
2 46, and wherein R1 and R2 each represent a long chain fatty acid selected from the group
3 consisting of:

- 4 (a) $\text{CH}_3(\text{CH}_2)_{10}$,
- 5 (b) $\text{CH}_3(\text{CH}_2)_{10}(\text{CH})_2(\text{CH}_2)_7$,
- 6 (c) $\text{CH}_3(\text{CH}_2)_{12}$,
- 7 (d) $\text{CH}_3(\text{CH}_2)_{14}$, and
- 8 (e) $\text{CH}_3(\text{CH}_2)_{16}$.

1 10) The compound of claim 1, wherein “n” is 23, and R1 and R2 are $\text{CH}_3(\text{CH}_2)_{10}$.

1 11) The compound of claim 1, wherein “n” is 12, and R1 and R2 are
2 $\text{CH}_3(\text{CH}_2)_{10}(\text{CH})_2(\text{CH}_2)_7$.

1 12) The compound of claim 1, wherein “n” is 23, and R1 and R2 are
2 $\text{CH}_3(\text{CH}_2)_{10}(\text{CH})_2(\text{CH}_2)_7$.

1 13) The compound of claim 1, wherein “n” is 45, and R1 and R2 are
2 $\text{CH}_3(\text{CH}_2)_{10}(\text{CH})_2(\text{CH}_2)_7$.

1 14) The compound of claim 1, wherein “n” is 12, and R1 and R2 are $\text{CH}_3(\text{CH}_2)_{12}$.

1 15) The compound of claim 1, wherein “n” is 23, and R1 and R2 are $\text{CH}_3(\text{CH}_2)_{12}$.

1 16) The compound of claim 1, wherein “n” is 45, and R1 and R2 are $\text{CH}_3(\text{CH}_2)_{12}$.

1 17) The compound of claim 1, wherein “n” is 23, and R1 and R2 are $\text{CH}_3(\text{CH}_2)_{14}$.

1 18) The compound of claim 1, wherein “n” is 45, and R1 and R2 are $\text{CH}_3(\text{CH}_2)_{14}$.

1 19) The compound of claim 1, wherein “n” is 12, and R1 and R2 are $\text{CH}_3(\text{CH}_2)_{16}$.

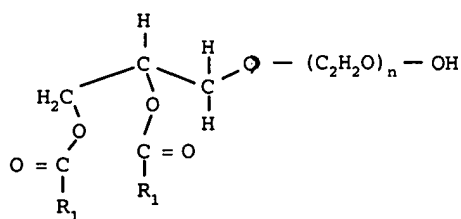
1 20) The compound of claim 1, wherein “n” is 23, and R1 and R2 are $\text{CH}_3(\text{CH}_2)_{16}$.

1 21) The compound of claim 1, wherein “n” is 45, and R1 and R2 are $\text{CH}_3(\text{CH}_2)_{16}$.

1 22) A composition of matter comprising one or more lipids having the formula

2

1



3

4 wherein R₁ is a long chain fatty acid chain between 11 and 25 carbons in length, R₂
5 is a long chain fatty acid chain between 11 and 25 carbons in length, and wherein the variable
6 “n” is an integer between 11 and 46, and

7 wherein said compound is further characterized by the ability to inhibit biological
8 activity of phospholipase A₂.

1 23) The composition of matter of claim 22, wherein said compound is characterized by
2 the ability to inhibit biological activity of phospholipase A₂ in vitro at concentrations less
3 than or equal to 1% by volume.

1 24) The composition of matter of claim 22, wherein said compound is characterized by
2 the ability to inhibit biological activity of cyclooxygenase-2

1 25) The composition of matter of claim 22, wherein said composition is a
2 pharmaceutical composition

1 26) The composition of matter of claim 25, further comprising a pharmaceutically
2 acceptable carrier.

1 27) The composition of matter of claim 22, wherein said composition is a foodstuff.

1 28) The composition of matter of claim 22, wherein said composition is a dietary
2 supplement.

1 29) The composition of matter of claim 22, wherein said composition is a cosmetic.

1 30) The composition of matter of claim 26, further comprising a delivery form selected
2 from the group consisting of: a tablet, a capsule, a syrup, a dragee, a suspension, an elixer,
3 a solution, a powder, granules, an emulsion, microspheres, nanospheres, lipid vesicles,
4 polymeric vesicles, or an injectable.

1 31) The composition of matter of claim 26, further comprising a delivery form selected
2 from the group consisting of an ointment, a cream, a milk, an impregnated pad, a gel, a
3 spray, and a lotion.

1 32) The composition of matter of claim 26, Adapted for topical administration.

1 33) The composition of matter of claim 32, wherein said one or more lipids comprise
2 .1% to 50% of the composition of matter by volume.

1 34) The composition of matter of claim 32, wherein said one or more lipids comprise
2 .1% to 10% of the composition of matter by volume.

1 35) The composition of matter of claim 32, consisting essentially of:

2	Purified water	50.00% to 80.00%
3	Isopropyl myristate	.50% to 5.00%
4	Caprylic/Capric Triglycerides	.50% to 5.00%
5	Dimethicone	.30% to 3.00%
6	Cyclomethicone	.60% to 6.00%
7	Tocopheryl Acetate	.08% to .75%
8	Stearly Alcohol	1.50% to 15.00%
9	PEG-23 Glyceryl Dipalmitate	1.50% to 15.00%
10	Cholesterol	.05% to .30%
11	BHT	.05% to .30%
12	Uniphen-23	.50% to 5.00%
13	PEG-100 Stearate	.60% to 6.00%
14	Glyceryl Stearate	.60% to 6.00%
15	Retinyl Palmitate	.30% to 3.00%
16	Imidurea	.10% to 1.00%

1 36) The composition of matter of claim 27, adapted for systemic administration.

1 37) The composition of matter of claim 22, wherein said compound is incorporated
2 into a liposome.

1 38) The composition of matter of claim 29, further comprising a cosmetically
2 acceptable carrier vehicle, or dilutant.

1 39) The composition of matter of claim 37, further a delivery form selected from the
2 group consisting of an ointment, a cream, a milk, an impregnated pad, a gel, a spray, a
3 lotion, a soap, and a shampoo.

1 40) A method for treating an inflammation related condition in a mammal comprising
2 the step of administering a composition according to claim 28.

1 41) A method for treating an inflammation related condition in a mammal comprising
2 the step of administering a composition according to claim 29.

1 42) A method for treating an inflammation related condition in a mammal comprising
2 the step of administering a composition according to claim 30.

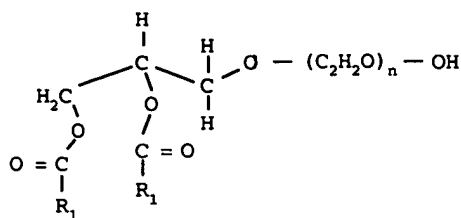
1 43) The method according to claim 40, wherein the inflammation related condition is
2 selected from the group consisting of: rheumatoid arthritis, osteoarthritis, psoriasis,
3 monoarthritis, gout, collagen vascular disease, pancreatitis, peritonitis, sepsis and shock,
4 renal failure, atopic dermatitis, and inflammatory skin conditions.

1 44) The method according to claim 41, wherein the inflammation related condition is
2 selected from the group consisting of: rheumatoid arthritis, osteoarthritis, psoriasis,
3 monoarthritis, gout, collagen vascular disease, pancreatitis, peritonitis, sepsis and shock,
4 renal failure, atopic dermatitis, and inflammatory skin conditions.

1 45) The method according to claim 42, wherein the inflammation related condition is
2 selected from the group consisting of: rheumatoid arthritis, osteoarthritis, psoriasis,
3 monoarthritis, gout, collagen vascular disease, pancreatitis, peritonitis, sepsis and shock,
4 renal failure, atopic dermatitis, and inflammatory skin conditions.

1 46) A method for treating an inflammation related condition in a mammal comprising
2 the step of administering an effective amount of a composition of matter comprising one
3 or more lipids having the formula
4

~



5

6 Wherein R₁ is a long chain fatty acid between 11 and 25 carbons in length, R₂ is a
7 long chain fatty between 11 and 25 carbons in length, and wherein the variable “n” is an
8 integer between 11 and 46.

1 47) The method of claim 46, wherein said composition of matter is a pharmaceutical
2 composition further comprising a pharmaceutically acceptable carrier.

1 48) The method of claim 46, wherein said composition of matter is a foodstuff.

1 49) The method of claim 46, wherein said composition of matter is a dietary
2 supplement.

1 50) The method of claim 46, wherein said composition of matter is a cosmetic.

1 51) The method of claim 47, wherein the inflammation related condition is selected
2 from the group consisting of: rheumatoid arthritis, osteoarthritis, psoriasis, monoarthritis,
3 gout, collagen vascular disease, pancreatitis, peritonitis, sepsis and shock, renal failure,
4 atopic dermatitis, and inflammatory skin conditions.

1 52) The method of claim 48, wherein the inflammation related condition is selected
2 from the group consisting of: rheumatoid arthritis, osteoarthritis, psoriasis, monoarthritis,
3 gout, collagen vascular disease, pancreatitis, peritonitis, sepsis and shock, renal failure,
4 atopic dermatitis, and inflammatory skin conditions.

1 53) The method of claim 49, wherein the inflammation related condition is selected
2 from the group consisting of: rheumatoid arthritis, osteoarthritis, psoriasis, monoarthritis,
3 gout, collagen vascular disease, pancreatitis, peritonitis, sepsis and shock, renal failure,
4 atopic dermatitis, and inflammatory skin conditions.

1 54) The method of claim 47, wherein said pharmaceutical composition comprises a
2 delivery form selected from the group consisting of: a tablet, a capsule, a syrup, a dragee,
3 a suspension, an elixer, a solution, a powder, granules, an emulsion, microspheres,
4 nanospheres, lipid vesicles, polymeric vesicles, an injectable, an ointment, a cream, a milk,
5 an impregnated pad, a gel, a spray, and a lotion.

1 55) The method of claim 50, further comprising a delivery form selected from the
2 group consisting of an ointment, a cream, a milk, an impregnated pad, a gel, a spray, and a
3 lotion.

1 56) The composition of matter of claim 46, wherein said one or more lipids comprise
2 .1% to 10% of the composition of matter by volume.

1 57) The method of claim 47, wherein said pharmaceutical composition is adapted for
2 topical administration.

1 58) The composition of matter of claim 57, consisting essentially of:

2		
3	Purified water	50.00% to 80.00%
4	Isopropyl myristate	.50% to 5.00%
5	Caprylic/Capric Triglycerides	.50% to 5.00%
6	Dimethicone	.30% to 3.00%
7	Cyclomethicone	.60% to 6.00%
8	Tocopheryl Acetate	.08% to .75%
9	Stearly Alcohol	1.50% to 15.00%
10	PEG-23 Glyceryl Dipalmitate	1.50% to 15.00%
11	Cholesterol	.05% to .30%
12	BHT	.05% to .30%
13	Uniphen-23	.50% to 5.00%
14	PEG-100 Stearate	.60% to 6.00%
15	Glyceryl Stearate	.60% to 6.00%
16	Retinyl Palmitate	.30% to 3.00%

17	Imidurea	.10% to 1.00%
----	----------	---------------

1 59) The composition of matter of claim 47, adapted for systemic administration.

1 60) The composition of matter of claim 46, wherein said compound is incorporated
2 into a liposome.